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| 10/753,465 | 01/09/2004 | Yao-Ming Wang | 3313-1092P | 6419 |
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| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | EXAMINER CHEN, ALAN S | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2182 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/753,465

Applicant(s)

WANG ET AL.

Examiner

Alan S. Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,10 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,10 and 12-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1,2,4-8,10 and 12-18 have been considered but are moot in view of the new ground(s) of rejection.
2. Previous 35 USC §112 rejections are vacated.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 1 and 8 recites the limitation "the IO controller" in lines 6 and 8, respectively. There is insufficient antecedent basis for this limitation in the claim. Examiner will assume applicant is referring to an IO controller on the IO card.
6. Claim 8 recites the limitation "the IC card" in line 4, respectively. There is insufficient antecedent basis for this limitation in the claim. Examiner will assume applicant is referring to the IO card.
7. Claims 2,4-7,10 and 12-18 are rejected as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1,2,4-8,10 and 12-18 are rejected under 35 USC 103(a) as being unpatentable over US Pat. Pub. No. 2003/0093606 to Mambakkam et al.

(*Mambakkam*).

11. Per claim 1, Mambakkam discloses a method for data transmission between an IO device (*Fig. 3B, element 42 shows an IO card adapter*) with an add-on memory card (*Fig. 3B, elements 16,18,24 and 28*) and a host system (*Fig. 3B, element 42, the card adapter is attached to a host; Paragraph 92 discloses card adapter is attachment to a PC*), comprising the steps of: providing the IO device with a socket therein (*Fig. 3B, element 44 is a socket*); inserting the memory card into the socket of the IO device (*Fig. 3B, one of the plurality of types of memory cards is inserted into the socket*); connecting the IO device to the host system (*Fig. 3B shows the IO device, e.g., card adapter, being connected to the host, in this particular embodiment, using USB*); and generating a bus control signal by a IO controller (*Fig. 3B, element 40*) after the host turns the IO controller to a transmitting mode (*Paragraph 92, USB is plug and play protocol,*

therefore, handshaking between the host and the card adapter will enable data transmission mode; Fig. 2B is the same case, PCMCIA is plug and play as well) and enables the IO controller to select a data transmission method through an IO controller on the IO device (Fig. 5, shows the various pins and therefore bus lines used by different formats of memory cards that is selectively plugged into IO device card adapter, each format being construed to be a different data transmission method) to selectively switch to a first data bus or a second data bus located in the IO device thereby to change data transmitting path between the memory card and the host system (Fig. 23 shows the different chip enable, CE lines, that logically determine which type of card media is operating, and therefore which of various bus lines to use, see Fig. 5. The CF format uses a specific combination of bus lines, construed to be a first bus. A MMC/SD format uses another different specific combination of bus lines, and therefore a second bus; Based the CE lines, selective switching between a CF format and MMC/SD format is possible).

Mambakkam does not disclose expressly the IO device being an IO card or the specifically show the memory car being inserted entirely into the socket.

However, in a particular embodiment shown in Mambakkam, the IO device is in the form factor of a PCMCIA IO card (Fig. 2B). It is obvious that a PCMCIA format can be used and advantageous to do so to utilize the widely adopted specification and be compatible with various PC platforms that use it, particularly in laptops. Furthermore, at the time of the invention it would have been obvious to a person of ordinary skill in the art to insert the card entirely into the socket. The suggestion/motivation for doing so

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would have been to prevent damage to the card by unintentional bumping of the hardware to objects, particularly if used in laptops, where they are mobile and have a higher chance of damage.

12. Per claim 2, Mambakkam discloses claim 1, further disclosing directly connecting the first data bus and the second data bus to the host system (*Fig. 2B, the memory card is directly connected to the host system via PCMCIA card*), and controlling a switch based on the bus control signal to selectively directly connect the inserted memory card to one of the first and second data bus (*Fig. 23, CEs are construed to be bus control signals selecting a specific type of card format and associating the card type to a bus, e.g., specific lines shown in Fig. 5*).

13. Claim 8 is substantially similar to claims 1 and 2, therefore the rejections for claims 1 and 2 are applied accordingly.

14. Per claims 4 and 10, Mambakkam discloses claims 1 and 8, further disclosing the memory card and IO card transmitting data directly via the first bus without passing through a data bus of the host system (*Fig. 2B and 5, for instance, if the CF card is operating, the CF bus lines shown in Fig. 5 exist in the PCMCIA card of Fig. 2B. Memory card signaling will be generated in the bus lines of the PCMCIA card first before entering the host system*).

15. Per claims 5, 12 and 15-18, Mambakkam discloses claims 1 and 8, Mambakkam further disclosing using some subset of the available data bus lines for a specific memory format (*Fig. 5*).

16. Per claims 6,7,13 and 14, Mambakkam discloses claims 1 and 8, Mambakkam further disclosing the IO device has a socket to electrically and mechanically couple with the memory card (*Fig. 3B, element 44 is both electrical and mechanical in nature*).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S. Chen whose telephone number is 571-272-4143. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Tsai can be reached on 571-272-4176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ASC
11/2/07

John E. Vn
11/2/07